

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given for the various sections of the climatological service of the Weather Bureau the monthly average temperature and total rainfall; the stations reporting the highest and lowest temperatures with dates of occurrence; the stations reporting the greatest and least total precipitation; and other data, as indicated by the several headings.

The mean temperature for each section, the highest

and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperatures and precipitation are based only on records from stations that have 10 or more years of observations. Of course the number of such records is smaller than the total number of stations.

Summary of temperature and precipitation by sections, November, 1914.

Section.	Temperature—in degrees Fahrenheit.								Precipitation—in inches and hundredths.							
	Section average.		Departure from the normal.		Monthly extremes.				Section average.		Departure from the normal.		Greatest monthly.		Least monthly.	
	Station.	Highest.	Date.	Station.	Lowest.	Date.	Station.	Amount.	Station.	Amount.	Station.	Amount.	Station.	Amount.	Station.	Amount.
Alabama.....	53.0	-1.1	3 stations.....	86	4†	Florence.....	9	20	4.13	+1.00	Mobile.....	10.23	Bridgeport.....	1.61		
Arizona.....	55.3	+3.2	Sacaton.....	95	5	Chin Lee.....	5	23	0.87	+0.01	Casa Grande.....	2.35	2 stations.....	0.00		
Arkansas.....	52.6	+1.7	2 stations.....	88	5†	4 stations.....	11	20	2.32	-1.56	Arkansas City.....	5.62	Eureka Springs.....	0.44		
California.....	54.2	+1.8	Santa Barbara.....	98	3	Tamarack.....	-2	30	0.80	-2.01	Wichitapec.....	7.64	28 stations.....	0.00		
Colorado.....	38.9	+3.7	Boshne.....	89	6	Dillon.....	-7	16	0.10	-0.76	Silver Lake.....	0.56	26 stations.....	0.00		
Florida.....	64.0	-0.7	Brooksville (1).....	90	6	Fenolloway.....	19	21	2.99	+0.80	Pensacola.....	13.53	Kissimmee.....	0.60		
Georgia.....	53.6	-1.2	Poulan.....	90	5	3 stations.....	12	20	4.99	+2.41	Glenville.....	9.73	Quitman.....	1.77		
Hawaii (October).....	73.4	.....	Waranee, Oahu.....	93	2	Volcano House, Hawaii.....	47	28†	4.60	.....	Kenai Valley, Maui.....	24.18	2 stations.....	0.00
Idaho.....	37.5	+1.4	Rupert.....	82	4†	Pierson.....	-15	30	0.83	-1.00	Prichard.....	5.61	4 stations.....	0.00		
Illinois.....	44.9	+3.4	St. Peter.....	95	7	Dakota.....	1	20	0.68	-1.90	Chester.....	1.90	2 stations.....	0.00		
Indiana.....	43.7	+1.3	Rome.....	81	7	2 stations.....	3	20†	1.07	-2.06	Salamonie.....	2.86	Collegeville.....	T.		
Iowa.....	41.0	+6.0	3 stations.....	90	2†	7 stations.....	-4	19	0.22	-1.29	Waverly.....	0.95	Lake Park.....	0.00		
Kansas.....	48.3	+5.2	Manhattan.....	88	3	2 stations.....	4	19	0.13	-1.07	Chanute.....	1.86	17 stations.....	0.00		
Kentucky.....	48.9	+0.9	Earinlong.....	83	2	4 stations.....	5	20	1.23	-2.36	Weeksbury.....	2.52	Irvington.....	0.68		
Louisiana.....	58.2	-0.6	Robeline.....	92	6	Antioch.....	17	20	5.25	+1.70	Lake-side.....	10.70	Lafayette.....	2.23		
Maryland and Dela-ware.....	44.5	-0.3	Cambridge, Md.....	82	4	Deer Park, Md.....	0	24	2.03	-0.45	Emmitsburg, Md.....	3.43	Chewsville, Md.....	1.04		
Michigan.....	36.5	+1.0	Five Channels.....	76	1	2 stations.....	-12	19†	1.84	-0.74	Whitefish Point.....	5.07	Sandusky.....	0.27		
Minnesota.....	33.0	+4.0	Fairmont.....	76	2	Roseau.....	-16	17	0.38	-0.74	Winton.....	1.90	5 stations.....	0.00		
Mississippi.....	54.6	-0.4	2 stations.....	8	4†	Corinth.....	11	20	3.92	0.00	Woodville.....	6.20	Holly Bluff.....	1.93		
Missouri.....	48.6	+4.0	Crocker.....	89	7	4 stations.....	2	19†	0.65	-1.84	Oakfield.....	2.07	4 stations.....	T.		
Montana.....	37.7	+5.8	Bridger.....	84	2	Bowen.....	-19	16	0.63	-0.40	Belton.....	5.72	4 stations.....	0.00		
Nebraska.....	42.6	+6.3	North Loup.....	87	6	3 stations.....	-7	19	0.01	-0.67	Wahon.....	0.15	43 stations.....	0.00		
Nevada.....	41.6	+1.5	2 stations.....	88	2†	Tecoma.....	-11	22	0.03	-0.67	Gold Creek.....	0.29	20 stations.....	0.00		
New England.....	36.7	-0.5	Durham, N. H.....	76	1	2 stations (Vt.).....	-10	24	2.62	-1.32	Rockport, Mass.....	4.10	Burlington, Vt.....	1.41		
New Jersey.....	43.3	+0.4	3 stations.....	80	4	Sussex.....	6	21	2.60	-0.80	Winton.....	1.90	5 stations.....	0.00		
New Mexico.....	44.9	+2.3	Fort Sumner.....	85	4	Elliabethtown.....	0	18†	0.31	-0.46	Woodville.....	6.20	Holly Bluff.....	1.93		
New York.....	36.1	-0.4	Spiers Falls.....	77	1	Indian Lake.....	-16	24	2.40	-0.62	Oakfield.....	2.07	4 stations.....	T.		
North Carolina.....	48.5	-1.0	Lumberton.....	83	3	Ramseur.....	0	21	3.68	+0.68	Belton.....	5.72	4 stations.....	0.00		
North Dakota.....	30.7	+4.9	Cando.....	83	2	' esthope.....	-30	16	0.35	-0.25	Highlands.....	10.98	43 stations.....	0.00		
Ohio.....	42.1	+1.1	Upper Sandusky.....	80	7	Bellefontaine.....	5	20	1.53	-1.11	Wallowa.....	0.83	Hatteras.....	1.63		
Oklahoma.....	53.2	+3.3	Mutual.....	95	1	4 stations.....	14	19†	0.69	-1.37	Wallowa.....	0.83	Orange.....	0.00		
Oregon.....	42.5	0.0	Powell Butte.....	76	11	Cliff.....	-1	21	2.40	-2.18	Kingfisher.....	3.44	Chilliwack.....	0.40		
Pennsylvania.....	40.6	0.0	Irwin.....	81	4	V. ellisboro.....	-2	24	1.76	-1.00	Riverton.....	4.30	9 stations.....	0.00		
Porto Rico.....	76.9	+0.1	Corozal.....	100	11	Maricopa.....	50	31†	8.22	+0.52	Astoria.....	11.26	3 stations.....	0.00		
South Carolina.....	52.4	-1.4	2 stations.....	86	5	2 stations.....	17	21	3.33	+0.99	Edinboro.....	4.27	Charlestown.....	0.00		
South Dakota.....	38.6	+6.1	3 stations.....	77	1†	Eureka.....	-16	19	0.04	-0.59	Plainview (near).....	2.34	Cheat Haven.....	0.57		
Tennessee.....	48.1	0.0	Johnsonville.....	88	7	Mountain City.....	-5	20	1.78	-1.95	Inabon Falls.....	23.00	Guamica Central.....	1.93		
Texas.....	57.7	+0.8	San Juanito.....	96	8	2 stations.....	18	17†	3.79	+1.51	Meriwether.....	5.89	Darlington.....	1.63		
Utah.....	38.9	+1.1	Low.....	85	12†	3 stations.....	-5	20†	0.12	-0.82	Timber Lake.....	0.70	18 stations.....	0.00		
Virginia.....	45.7	-0.2	Fredericksburg.....	82	4	Burkes Garden.....	7	24	2.53	+0.11	Franklin (near).....	4.05	New River.....	0.69		
Washington.....	41.8	+1.4	Anadone.....	72	1	Snyders Ranch.....	2	15	5.08	-0.67	Liberty.....	10.91	9 stations.....	0.00		
West Virginia.....	42.6	-0.2	2 stations.....	84	2†	Bayard.....	2	22	1.32	-1.28	Lower Mill Creek.....	0.59	9 stations.....	0.00		
Wisconsin.....	34.8	+2.5	Prairie du Chien.....	75	2	Weyerhaeuser (2).....	-10	20	1.02	-0.76	W. aynesboro.....	4.75	Hot Springs.....	0.58		
Wyoming.....	36.1	+3.7	Wheatland.....	86	5	2 stations.....	-13	15†	0.13	-0.49	Quinault.....	24.29	Eltopia.....	0.03		

† Other dates also.

DESCRIPTION OF TABLES AND CHARTS.

Table I gives the data ordinarily needed for climatological studies for about 158 Weather Bureau stations making simultaneous observations at 8 a. m. and 8 p. m., seventy-fifth meridian time daily, and for about 41 others making only one observation. The altitudes of the instruments above ground are also given.

Table II gives a record of precipitation, the intensity of which at some period of the storm's continuance equaled or exceeded the following rates:

Duration (minutes).....	5	10	15	20	25	30	35	40	45	50	60
Rates per hour (inches).....	3.00	1.90	1.40	1.20	1.08	1.00	0.94	0.90	0.87	0.84	0.80

It is impracticable to make this table sufficiently wide to accommodate on one line the record of accumulated falls that continue at an excessive rate for several hours. In this case the record is broken at the end of each 50

minutes, the accumulated amounts being recorded on successive lines until the excessive rate ends.

In cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest precipitation of any single storm has been given, also the greatest hourly fall during that storm.

Table III gives, for about 30 stations of the Canadian Meteorological Service, the means of pressure and temperature, total precipitation and depth of snowfall, and the respective departures from normal values, except in the case of snowfall.

Chart I.—Hydrographs for several of the principal rivers of the United States.

Chart II.—Tracks of centers of high areas; and

Chart III.—Tracks of centers of low areas. The roman numerals show the chronological order of the centers. The figures within the circles show the days of the month;

the letters *a* and *p* indicate, respectively, the observations at 8 a. m. and 8 p. m., seventy-fifth meridian time. Within each circle is also given (Chart II) the last three figures of the highest barometric reading and (Chart III) the lowest reading reported at or near the center at that time, and in both cases as reduced to sea level and standard gravity.

Chart IV.—Temperature departures. This chart presents the departures of the monthly mean temperatures from the monthly normals. The normals used in computing the departures were computed for a period of 31 years (1873 to 1903) and are published in Weather Bureau Bulletin "R," Washington, 1908. The shaded portions of the chart indicate areas of positive departures and unshaded portions indicate areas of negative departures. Generalized lines connect places having approximately equal departures of like sign. This chart of monthly temperature departures in the United States was first published in the Monthly Weather Review for July, 1909.

Chart V.—Total precipitation. The scale of shades showing the depth is given on the chart. Where the monthly amounts are too small to justify shading, and over sections of the country where stations are too widely separated or the topography is too diversified to warrant reasonable accuracy in shading, the actual depths are given for a limited number of representative stations. Amounts less than 0.005 inch are indicated by the letter T, and no precipitation by 0.

Chart VI.—Percentage of clear sky between sunrise and sunset. The average cloudiness at each Weather Bureau station is determined by numerous personal observations between sunrise and sunset. The difference between the observed cloudiness and 100 is assumed to represent the percentage of clear sky, and the values thus obtained are

the basis of this chart. The chart does not relate to the night time.

Chart VII.—Isobars and isotherms at sea level and prevailing wind directions. The pressures have been reduced to sea level and standard gravity by the method described by Prof. Frank H. Bigelow on pages 13–16 of the REVIEW for January, 1902. The pressures have also been reduced to the mean of the 24 hours by the application of a suitable correction to the mean of the 8 a. m. and 8 p. m. readings at stations taking two observations daily, and to the 8 a. m. or the 8 p. m. observations, respectively, at stations taking but a single observation. The diurnal corrections so applied will be found in the Annual Report of the Chief of the Weather Bureau, 1900–1901, volume 2, Table 27, pages 140–164.

The isotherms on the sea-level plane have been constructed by means of the data summarized in chapter 8 of volume 2 of the annual report just mentioned. The correction $t_0 - t$, or temperature on the sea-level plane minus the station temperature as given by Table 48 of that report, is added to the observed surface temperature to obtain the adopted sea-level temperature.

The prevailing wind directions are determined from hourly observations at the great majority of the stations; a few stations having no self-recording wind direction apparatus determine the prevailing direction from the daily or twice-daily observations only.

Chart VIII.—Total snowfall. This is based on the reports from regular and cooperative observers and shows the depth in inches and tenths of the snowfall during the month. In general, the depth is shown by lines inclosing areas of equal snowfall, but in special cases figures are also given.

Chart VIII is published only when the general snow cover is sufficiently extensive to justify its preparation.

TABLE I.—Climatological data for United States Weather Bureau stations, November, 1914.

Districts and stations.	Elevation of instruments.		Pressure in inches.		Temperature of the air, in degrees Fahrenheit.						Precipitation, inches.			Wind.			Maximum velocity.		Snow on ground at end of month.					
	Barometer above sea level, feet.	Thermometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max.-mean min. +2.	Departure from normal.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Total.	Departure from normal.	Days with 0.01 or more.	Total movement, miles.	Precipitation direction.	Miles per hour.	Date.	Clear days.	Partly cloudy days.	Cloudy days.	Total snowfall.	
	Anemometer above ground.																							
New England.																								
Eastport.	76	67	85	29.90	29.98	- .03	35.6	- 1.2	58	1 44	12	18	28	33	32	28	75	2.54	- 1.0	55	ne.	20	5 11 14 6.8 4.5	
Greenville.	1,070	6	28.78	29.98		28.4		59	1 37	2	19	20	33	31	20	21	66	2.10	- 1.3	9	sw.	48	se.	16 12 4 14 5.5 7.4
Portland, Me.	103	82	117	29.91	30.05	- .01	36.6	- 1.0	72	1 43	14	23	28	34	32	25	66	3.17	- 0.6	9	7,728	30	w.	17 6 12 5.3 8.8 2.0
Concord.	288	70	79	29.73	30.07	- .01	35.1	- 1.0	83	1 45	11	23	25	44			2.27	- 1.1	4	4,271	nw.	46	s.	24 3 9 18 7.5 14.9 T
Burlington.	404	11	48	29.58	30.01	- .04	33.1	+ 0.2	65	1 42	2	24	28	31			1.41	- 1.2	13	10,125	s.	37	sw.	4 7 19 7.4 14.7 T
Northfield.	876	12	80	29.08	30.03	- .02	31.5	+ 0.8	69	1 41	20	24	35	28	38	32	69	2.90	+ 0.3	12	6,228	43	ne.	19 7 11 12 5.8 T
Boston.	125	115	188	29.90	30.04	- .01	42.7	+ 1.5	74	1 51	20	24	38	24	41	36	74	2.72	- 1.4	8	8,494	52	ne.	19 8 14 8 5.5 T
Nantucket.	12	14	90	30.04	30.05	- .00	44.4	+ 0.8	63	1 51	20	24	39	34	41	35	71	2.32	- 1.0	8	12,835	58	ne.	19 8 16 6 6.4 T
Block Island.	26	11	46	29.02	30.05	- .01	44.2	- 0.1	61	1 51	16	24	34	28	36	30	65	2.59	- 1.2	16	15,010	50	sw.	17 5 8
Narragansett Pier.	9																							
Providence.	160	25	251	29.88	30.06	- .01	40.8	+ 0.4	70	1 49	20	24	33	29	36	30	66	1.98	- 1.9	8	10,269	50	nw.	2 11 12 7 5.0 T
Hartford.	159	122	140	29.59	30.07	- .01	41.0	+ 1.5	72	1 49	20	24	33	29	35	29	68	2.38	- 1.4	6	6,273	40	sw.	13 8 12 10 5.8 4.5
New Haven.	106	117	155	29.95	30.07	- .00	42.6	+ 1.3	71	4 51	19	24	34	27	36	30	65	3.28	- 0.3	7	7,572	19	sw.	8 10 12 8 4.8 1.4
Middle Atlantic States.																								
Albany.	97	102	115	29.95	30.06	- .02	38.1	- 0.3	71	4 46	13	24	30	30	33	28	70	2.19	- 0.6	10	5,627	42	s.	13 7 9 14 6.5 7.9 T
Binghamton.	871	10	60	29.11	30.06	- .03	38.2	+ 0.6	66	4 46	8	24	30	29	38	30	62	2.08	- 1.4	14	4,377	28	nw.	13 5 13 12 6.6 4.7
New York.	314	414	454	29.74	30.08	- .01	44.0	0.0	73	4 52	22	23	36	25	38	30	62	1.5	325	65	sw.	15 11 9 10 5.5		
Harrisburg.	374	94	104	29.72	30.14	+ .03	43.2	+ 2.1	74	4 52	21	24	35	29	38	29	62	1.25	- 1.1	6	5,650	34	sw.	13 7 6 6 5.2 T
Philadelphia.	117	123	190	29.99	30.12	+ .02	46.2	+ 1.3	76	5 54	21	24	38	29	40	33	65	1.79	- 1.3	6	8,339	33	e.	15 10 11 9 5.7 T
Reading.	325	81	98	29.76	30.12		43.8		74	5 52	15	24	35	30	37	29	62	2.14	- 1.0	3	5,742	35	sw.	13 3 17 10 6.1 3.6
Scranton.	205	111	119	29.21	30.10	+ .01	40.2	+ 1.1	69	4 46	15	24	32	26	35	30	71	1.12	- 1.2	5	7,170	34	s.	15 10 13 10 7 4.5
Atlantic City.	52	37	48	30.06	30.12	+ .02	46.0	+ 0.5	70	2 53	22	24	39	26	41	35	68	1.21	- 2.0	6	6,356	40	sw.	15 14 13 3 4.2
Cape May.	18	13	49	30.12	30.14	+ .04	47.3	- 0.1	74	4 54	12	24	40	25	37	31	67	1.76	- 1.5	7	7,311	46	sw.	13 13 10 7 4.8 T
Trenton.	190	159	183	29.89	30.10		43.5		76	4 52	22	24	35	31	37	31	67	1.62	- 1.8	6	9,506	37	n.	8 16 7 4.1
Baltimore.	123	100	113	30.00	30.14	+ .03	47.0	+ 1.2	74	4 56	26	21	38	31	39	32	66	2.08	- 0.7	3	5,387	38	nw.	16 15 5 10 4.4
Washington.	112	62	85	30.00	30.13	+ .01	45.4	+ 0.4	79	4 56	20	24	35	32	39	32	66	2.06	- 0.6	4	5,186	30	sw.	20 14 10 6 5.1
Lynchburg.	681	153	188	29.39	30.14	+ .01	46.8	+ 0.5	79	4 58	16	24	35	28	39	31	61	2.31	- 0.5	6	6,692	74	nw.	16 11 12 7 5.4
Mount Weather.	1,725	10	75	28.24	30.11	- .01	41.4	+ 1.0	74	4 50	18	21	33	34	35	27	59	2.39	- 0.5	4	14,503	37	sw.	15 17 3 10 4.2
Norfolk.	91	170	205	30.05	30.15	+ .04	51.0	- 0.2	77	4 59	25	21	43	27	44	38	67	2.62	- 0.1	6	9,734	40	sw.	8 17 6 7 3.5
Richmond.	144	11	52	29.99	30.15	+ .03	48.0	+ 0.8	80	4 59	21	24	37	33	40	33	63	2.20	- 0.2	6	6,936	24	nw.	8 17 6 7 3.5
Wytheville.	2,293	40	47	27.75	30.19	+ .06	41.8	- 1.2	70	4 52	12	21	32	37	35	30	73	2.51	- 0.5	6	4,372	16	w.	16 21 4 5 2.7 1.5
South Atlantic States.																								
Asheville.	2,255	70	84	27.79	30.20	+ .06	44.1	- 1.0	72	7 56	9	20	32	35	37	32	70	4.06	+ 0.8	8	5,323	40	e.	14 18 4 8 4.0 1.3
Charlotte.	773	68	76	29.81	30.16	+ .03	50.5	+ 0.1	77	4 60	19	21	41	33	42	35	63	2.45	- 0.4	27	ne.	29	15 6 9 4.5 T	
Hatteras.	11	12	50	30.12	30.13	+ .02	55.6	- 1.1	76	8 62	32	21	49	22	51	47	78	1.63	- 3.0	56	sw.	15 13 7 10 4.7		
Manteo.	12	4	46				51.0		79	4 63	27	22	39	30	38	30	76	2.66	- 2.0	6	5,600	25	sw.	19 8 4 8 3.7 3.0
Raleigh.	376	103	110	29.74	30.16	+ .03	50.8	+ 0.5	78	4 61	17	21	41	33	42	34	60	3.38	+ 1.0	5	5,600	29	e.	14 18 6 6 3.4 T
Wilmington.	78	81	91	30.07	30.16	+ .04	54.4	+ 0.3	79	3 64	24	21	44	31	47	41	70	3.30	+ 0.8	5	5,044	38	n.	23 15 5 10 3.4
Charleston.	48	11	92	30.09	30.14	+ .02	57.0	- 1.1	79	5 65	27	21	48	26	50	45	70	2.34	- 0.5	6	7,730	38	sw.	23 15 5 10 3.4
Columbia, S. C.	351	41	57	29.77	30.16	+ .04	53.3	- 0.5	81	5 65	22	21	42	36	44	46	60	3.48	+ 1.2	6	6,408	35	w.	20 20 2 8 3.4
Augusta.	180	89	97	29.96	30.16	+ .03	53.4	- 0.5	81	5 65	21	20	41	36	46	42	76	4.92	+ 2.0	7	9,941	37	sw.	19 17 4 9 4.6
Savannah.	65	150	194	30.07	30.14	+ .02	58.0	+ 0.5	80	3 67	20	24	49	36	48	50	79	5.55	+ 3.2	8	9,023	48	w.	20 15 6 10 4.6
Jacksonville.	43	96	120	30.07	30.12	+ .02	61.1	- 0.2	83	5 70	29	21	53	26	54	51	76	3.87	+ 1.7	7	6,584	30	w.	20 14 6 10 4.6
Florida Peninsula.																								
Key West.	22	10	64	30.00	30.02	- .00	73.0	- 1.3	85	15 77	55	21	69	15	67	65	79	2.33	0.0	10	8,477	34	n.	20 8 9 13 6.2
Miami.	25	71	79	30.01	30.04	- .00	70.6	- 1.4	82	9 75	36	21	66	25	65	61	73	2.06	+ 4.5	10	8,563	31	ne.	24 8 13 6 16 7.1
Sand Key.	35	39	72	29.96	29.99	- .03	73.3		83	15 76	35	21	58	28	59	55	75	3.20	+ 0.3	7	5,512	30	nw.	20 6 13 11 6.1
Tampa.	35	79	96	30.04	30.08	- .00	66.2	+ 0.8	82	8 75	32	21	58	28	59	55	75	1.05	-	10	.....	9 13 8 5.3		
Titusville.	44	6	.....	30.03	30.08	- .00	66.4	+ 0.5	84	15 74	30	21	59	29	55	52	77	4.05	-	10	.....	9 13 8 5.3		
East Gulf States.																								
Atlanta.	1,174	190	216	28.90	30.16	+ .03	52.4	- 0.5																

TABLE I.—Climatological data for United States Weather Bureau stations, November, 1914—Continued.

Districts and stations.	Elevation of instruments.			Pressure in inches.		Temperature of the air, in degrees Fahrenheit.						Precipitation, inches.			Wind.			Maximum velocity.					
	Barometer above sea level, feet.	Thermometer above ground.	Anemometer above ground.	Station, reduced to mean of 24 hours.	Sea level reduced to mean of 34 hours.	Departure from normal.	Mean maximum.	Maximum.	Departure from normal.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew point.	Mean relative humidity, per cent.	Total.	Days with 0.01 or more.	Departure from normal.	Days with 0.01 or more.	Prevailing direction.	Miles per hour.	Date.		
				mean of 24 hours.	mean of 34 hours.	Departure from normal.	max + mean min. + 2.	max.	Departure from normal.	min.	range.	mean.	mean.	per cent.	total.	total movement,	days with 0.01 or more.	direction.	maximum miles.	date.			
<i>Ohio Valley and Tennessee.</i>																							
Chattanooga.	762	189	213	29.36	30.19	+.05	50.1	-0.2	47.7	+0.2	47.5	12	29	39	41	3.21	-0.4	8	4,860	19	13		
Knoxville.	906	93	100	29.10	30.18	+.05	50.2	+0.2	47.8	+0.2	48.0	13	29	36	41	2.39	-2.3	7	3,350	27	19		
Memphis.	393	76	97	27.75	30.19	+.07	53.5	+2.2	52.8	+2.2	53.6	16	23	45	45	2.05	-2.5	6	5,115	47	15		
Nashville.	546	168	191	29.59	30.19	+.07	49.0	+0.9	73	+0.6	61	19	20	36	42	3.44	-1.7	6	5,311	42	16		
Lexington.	989	75	102	21.07	30.16	+.04	45.7	+1.0	75	+1.0	75	10	20	36	20	1.62	-1.9	6	7,817	38	16		
Louisville.	525	219	255	29.58	30.16	+.04	48.5	+2.2	77	+2.2	78	10	20	39	30	0.75	-3.4	4	8,723	33	16		
Evansville.	431	72	82	24.68	30.18	+.04	41.1	+1.9	78	+1.9	75	12	24	43	34	0.65	-3.5	4	5,051	27	17		
Indianapolis.	822	154	184	23.29	30.13	+.03	44.3	+2.7	74	+2.7	74	13	20	35	31	1.45	-2.1	6	7,723	31	17		
Terre Haute.	575	96	124	29.43	30.12	-.01	46.0	-1.7	57	-1.7	57	16	20	36	35	1.39	-2.0	5	7,034	34	16		
Cincinnati.	628	152	189	45.30	30.14	+.02	45.7	+1.1	77	+1.1	77	11	24	37	34	1.21	-2.0	4	5,305	28	16		
Columbus.	824	173	222	23.21	30.13	+.02	42.9	+1.5	74	+1.5	72	11	20	33	30	1.9	-1.1	5	9,542	42	12		
Dayton.	830	131	216	23.13	30.11	-.01	41.8	+1.1	76	+1.1	76	11	20	34	29	1.11	-1.8	5	8,217	34	12		
Pittsburgh.	842	353	410	23.20	30.12	+.02	42.3	0.6	72	+1.1	71	18	21	34	44	1.35	-1.2	4	9,738	47	12		
Elkins.	1,943	41	50	28.06	30.18	+.06	41.4	+1.8	71	+1.8	71	8	24	30	45	0.73	-2.1	3	3,968	21	12		
Parkersburg.	638	77	84	29.49	30.16	+.04	45.4	+2.2	76	+2.2	76	16	23	35	38	0.80	-2.0	6	4,502	32	15		
<i>Lower Lake Region.</i>																							
Buffalo.	767	247	280	29.18	30.03	-.02	40.0	+0.7	64	+0.7	64	7	45	19	18	33	26	36	33	80	71	16	
Canton.	448	10	61	29.51	30.00	....	31.6	+0.7	64	+0.7	64	4	23	26	35	30	3.05	-0.4	16,425	84	2	
Oswego.	335	76	91	30.04	30.02	-.03	38.5	-0.6	67	-0.6	67	14	18	31	28	35	10,012	60	13				
Rochester.	523	97	113	29.39	30.05	-.00	33.6	+1.7	65	+1.7	65	17	24	32	28	34	2.49	-1.4	5,445	43	12		
Syracuse.	597	97	113	29.39	30.05	-.01	38.6	-0.1	66	-0.1	66	15	18	31	29	34	2.85	-1.6	10,355	50	11		
Erie.	714	92	102	29.26	30.05	-.01	41.7	+0.6	72	+0.6	72	13	20	37	36	3.05	-2.1	11,362	52	10			
Cleveland.	762	190	201	29.24	30.05	+.01	41.8	+1.1	75	+1.1	75	18	20	39	36	3.05	-1.4	8,187	53	9			
Sandusky.	629	60	103	29.39	30.05	-.00	41.6	+0.8	73	+0.8	73	14	20	33	31	3.7	-2.0	8,115	50	8			
Toledo.	628	205	216	29.39	30.03	+.02	41.6	+1.9	71	+1.9	70	16	20	33	32	3.7	-2.0	8,213	55	7			
Fort Wayne.	856	113	124	29.15	30.10	....	41.4	+0.8	70	+0.8	70	11	13	32	27	3.6	-0.75	8,344	48	6		
Detroit.	730	213	245	29.25	30.06	....	33.6	+1.0	68	+1.0	68	7	47	16	20	33	27	3.65	11,193	48	6	
<i>Upper Lake Region.</i>																							
Alpena.	603	13	92	29.30	29.98	-.03	34.6	+0.9	67	+1.2	67	1	42	9	19	28	25	32	28	81	78	14	
Escanaba.	612	54	60	29.30	29.98	-.05	31.0	+0.3	68	+0.6	68	6	18	27	33	30	2.85	-0.4	10,402	52	3		
Grand Haven.	632	54	92	29.33	30.03	-.01	40.0	+0.2	61	+0.2	61	17	18	31	24	32	1.94	-0.6	11,848	31	6		
Grand Rapids.	707	70	87	29.26	30.04	-.01	34.6	+1.5	61	+1.5	61	18	20	33	22	35	1.47	-1.1	11,624	53	5		
Houghton.	834	62	72	29.20	29.91	-.03	32.4	+0.9	61	+1.3	61	3	18	26	28	27	2.60	-0.2	8,515	28	4		
Lansing.	878	11	62	29.03	30.01	....	37.6	+0.8	65	+0.8	65	11	19	28	27	33	2.80	-1.0	5,986	43	1	
Ludington.	837	60	66	29.30	30.00	....	35.0	....	53	....	53	18	19	34	32	37	1.28	-0.1	10,500	17	1
Marquette.	734	77	111	29.17	29.93	-.03	37.3	+1.7	65	+1.7	65	1	18	27	31	34	2.43	-0.4	8,285	42	1		
Port Huron.	638	70	120	29.32	30.03	-.02	37.7	+0.9	67	+0.9	67	9	20	23	32	31	1.78	-1.5	9,936	41	1		
Saginaw.	614	48	83	29.32	30.03	....	37.4	....	64	....	64	11	19	26	24	31	1.53	-0.8	8,066	36	1
Sault Ste. Marie.	614	11	61	29.25	29.96	-.05	31.5	+0.5	63	+0.5	63	8	20	25	24	29	1.27	-2.2	8,800	16	1		
Chicago.	823	140	310	23.17	30.07	-.03	44.4	+5.2	71	+5.2	71	1	51	12	20	37	38	31	60,006	34	2		
Green Bay.	617	103	144	23.33	30.01	....	38.3	+3.3	63	+3.3	63	1	43	10	13	28	27	31	6,505	37	1	
Milwaukee.	681	119	133	23.29	30.04	....	40.4	+4.3	63	+4.3	63	8	19	33	29	35	0.47	-1.5	8,576	35	1	
Duluth.	1,133	11	47	28.76	30.01	29.8	+0.5	54	+0.5	54	3	37	-	4	19	23	27	80	7,10,425	46	1	
<i>North Dakota.</i>																							
Moorhead.	940	8	57	29.01	30.06	-.01	31.1	+6.7	61	+6.7	61	2	41	-	6	17	21	40	27	7,333	32	15	
Bismarck.	1,674	57	58	28.30	30.01	32.4	+8.6	63	+8.6	63	1	46	2	3	19	23	33	2.42	7,345	46	13	
Devils Lake.	1,483	11	44	23.35	30.01	....	32.0	+6.4	63	+6.4	63	2	32	-	7	17	21	48	9,016	40	10	
Williston.	1,872	40	47	27.99	30.02	....	32.9	+7.7	62	+7.7	62	2	45	-	7	17	21	48	5,256	50	9	
<i>Upper Mississippi Valley.</i>																							
Minneapolis.	918	10	208	29.02	30.03	36.0	66	66	2	44	-	1	19	28	31	0.19	-1.0	9,514	39	12
St. Paul.	837	201	236	29.12	30.05	-.01	36.0	+5.1	66	+5.1	66	2	44	-	6	19	28	31	0.48	-0.8	9,940	48	10
La Crosse.	714	11	48	23.27	30.06	37.6	+3.8	63	+3.8	63	2	46	-	2	19	29	30	0.67	-0.8	4,544	21	9
Madison.	974	70	78	29.30	30.07	39.1	+3.2	64	+3.2	64	3	46	-	3	19	30	33	0.70	-1.1	6,351	35	8
Charles City.	1,015	10	49	28.98	30.03	37.2	+4.7	70	+4.7	70	2	48	-	4	19	26	34	0.37	-1.0	5,357	25	7
Davenport.	608	71	79	29.42	30.09	40.4	+5.5	72	+5.5	72	5	33	-	5	19	33	34	0.37	-1.5	5,819	26	6
Das Moinas.	861	84	97	29.18	30.03	40.2	+6.4	76	+6.4	76	2	54	-	3	19	33	34	0.35	-1.1	5,436	26	5
Dubuque.	638	96	98	23.32	30.09	40.6	+6.0	63	+6.0	63	3	50	-	4	19	32	30	0.21	-1.6	4,227	35	4
Keokuk.	614	64	78	23.43	30.12	....	43.1	+5.7	77	+5.7	77	6	19	35	33	34	0.21	-1.4	5,443	30	3	
Cairo.	356	87	93	23.76	30.15	....	43.1	+5.1	72	+5.1	72	11	20	41	33	43	0.21	-1.4	5,443	30	2	
Peoria.	603	11	45	23.41	30.11	....	43.2	+5.9	73	+5.9	73	7	20	32	34	36	0.21	-2.4	5,472	25	1	
Springfield, Ill.	614	10	91	23.42	30.12	....	43.2	+6.2	55	+6.2	55	10	20	37	25	33	0.17	-2.2	6,318	23	16	
Hannibal.	531	70	109	23.51	30.13	....	40.4	+5.7	50	+5.7	50	8	19	35	37	40	0.17	-1.8	6,791	22	21	
St. Louis.	567	265	333	29.51	30.12	....	50.3	+8.3	80	+8.3	80	13	19	41	30	43	1.53	-1.4	9,493	40	21	
<i>Missouri Valley.</i>																							
Columbia, Mo.	781	11	84	29.28	30.13	....	48.1	+5.7	80	+5.7	80	9	19	37	36							

TABLE I.—Climatological data for United States Weather Bureau stations, November, 1914—Continued.

Districts and stations.	Elevation of instruments.		Pressure in inches.		Temperature of the air, in degrees Fahrenheit.										Precipitation, inches.		Wind.			Maximum velocity.		Average cloudiness, tenths.		Total snowfall.						
	Barometer above sea level, feet.	Thermometer above ground.	Station, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. + mean min. + mean min. + mean min. +	Maximum.	Departure from normal.	Date.	Mean maximum.	Minimum.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Total.	Mean relative humidity, percent.	Departure from normal.	Days with 0.01 or more.	Total movement, miles.	Precipitation direction.	Miles per hour.	Date.	Clear days.	Partly cloudy days.	Cloudy days.					
		Anerometer above ground.																												
<i>Northern Slope.</i>																										5.4				
Havre.....	2,506	11	44	27.33	30.01	-.02	36.7 + 6.1	68	25	48	-1	16	28	35	32	74	0.24	-0.5	3	7,035	sw.	38	sw.	2	5	9	16	6.9	2.3	
Helena.....	4,110	87	114	25.83	30.09	-.01	39.0 + 6.3	62	1	48	5	16	30	27	32	61	0.27	-0.4	3	5,645	sw.	43	w.	13	5	13	14	6.6	...	
Kalispell.....	2,962	11	34	26.98	30.09	+.02	36.4 + 3.2	55	9	43	13	16	30	27	33	30	80	1.53	-0.3	13	2,482	sw.	27	sw.	5	4	19	19	7.8	3.6
Miles City.....	2,371	26	48	27.51	30.11	+.04	34.8 + 9.9	70	25	53	7	16	28	35	33	68	0.18	-0.4	5	3,055	s.	30	w.	9	19	8	3	3.5	1.1	
Rapid City.....	3,259	50	58	26.63	30.11	+.03	42.8 + 9.2	70	5	56	6	16	28	42	34	23	50	0.04	-0.4	1	5,930	w.	48	n.	13	7	16	7	5.7	0.5
Cheyenne.....	6,088	84	101	24.06	30.12	+.05	41.4 + 6.5	70	5	54	1	16	28	38	30	18	48	0.26	-0.2	2	9,243	w.	74	sw.	13	13	11	1	3.7	2.7
Lander.....	5,372	60	68	24.71	30.17	+.07	37.5 + 8.8	71	1	55	3	16	28	55	27	16	49	0.00	-0.6	0	3,108	sw.	38	sw.	13	15	2	2	4.2	1.4
Sheridan.....	3,790	10	47	26.14	30.14	-.03	36.6 + 6.9	69	25	54	-10	16	19	52	28	20	62	0.03	...	3	3,080	s.	48	nw.	13	5	14	11	6.2	1.0
Yellowstone Park.....	6,200	11	43	23.95	30.18	+.07	33.8 + 4.5	78	5	44	23	16	27	48	32	23	59	0.35	-1.1	5	6,044	s.	43	s.	13	8	12	10	6.1	2.8
North Platte.....	2,821	11	51	27.16	30.15	+.07	43.7 + 8.8	80	6	61	13	16	27	48	32	23	T.	-0.4	0	4,459	n.	27	n.	12	17	11	2	3.0	T.	
<i>Middle Slope.</i>																											2.7			
Denver.....	5,291	129	172	24.80	30.11	+.05	46.2 + 7.0	75	5	61	15	16	31	41	33	19	40	0.30	-0.2	3	5,701	sw.	28	nw.	17	21	9	0	2.2	2.9
Pueblo.....	4,685	80	86	25.37	30.14	+.09	43.5 + 4.2	79	5	62	16	19	25	51	31	20	48	T.	-0.4	0	3,563	nw.	25	nw.	20	24	5	5	1.5	T.
Concordia.....	1,398	42	50	28.62	30.12	+.04	47.5 + 7.6	83	6	62	7	19	33	42	39	33	64	T.	-0.9	0	4,156	sw.	22	w.	18	13	12	5	4.1	T.
Dodge.....	2,509	11	51	27.48	30.12	+.05	48.4 + 7.9	79	2	64	20	19	33	47	38	30	61	T.	-0.6	0	6,194	s.	30	n.	14	21	7	2	2.4	T.
Wichita.....	1,353	139	158	28.64	30.09	+.01	50.9 + 7.1	78	3	62	15	19	39	47	43	35	63	0.11	-1.1	2	8,782	s.	38	sw.	14	21	5	7	2.5	...
Oklahoma.....	1,214	10	47	28.83	30.13	+.05	53.6 + 5.7	82	5	65	23	20	42	37	45	40	69	0.70	-1.6	2	8,232	s.	46	nw.	7	15	13	2	3.3	...
<i>Southern Slope.</i>																											4.0			
Abilene.....	1,738	10	52	28.29	30.12	+.05	55.4 + 2.8	78	5	66	29	17	45	39	49	45	78	3.48	+ 2.2	10	4,865	s.	26	ne.	15	11	6	13	5.2	...
Amarillo.....	3,676	10	49	26.35	30.11	+.06	50.4 + 6.6	76	14	64	23	17	37	40	41	35	68	T.	-1.2	0	6,069	sw.	28	s.	17	26	4	0	2.4	...
Del Rio.....	944	64	71	29.08	30.08	+.03	59.8 + 0.5	77	5	67	20	24	52	30	30	26	78	3.76	+ 2.6	0	4,700	s.	28	nw.	15	10	9	11	5.7	...
Roswell.....	3,566	75	85	26.45	30.10	+.07	50.2 + 2.1	77	7	64	23	19	36	44	42	34	63	0.30	-0.9	4	3,733	n.	21	n.	27	21	5	4	2.7	...
<i>Southern Plateau.</i>																											2.4			
El Paso.....	3,762	110	133	30.04	.00	54.7 + 3.8	74	7	66	34	20	44	33	33	32	24	58	1.13	+ 0.5	6	5,386	se.	33	n.	11	15	11	4	...	...
Santa Fe.....	7,013	57	62	23.32	30.12	+.09	43.0 + 4.8	63	4	55	24	19	31	30	31	19	45	T.	-0.8	0	4,262	e.	26	n.	12	24	6	0	1.9	...
Flagstaff.....	6,908	8	57	39.00	30.11	+.04	39.0 + 4.4	62	12	55	14	21	23	44	39	32	50	0.10	2	2	2,448	e.	28	e.	19	19	9	2	1.0	...
Phoenix.....	1,108	76	81	28.82	29.97	-.01	63.9 + 5.2	84	8	76	42	30	51	32	54	45	56	1.00	0.0	2	3,145	e.	26	n.	19	19	8	3	2.9	...
Yuma.....	141	9	58	29.81	29.96	-.02	66.2 + 4.3	90	4	80	45	30	53	33	52	47	52	0.47	+ 0.2	1	3,083	ne.	24	n.	18	27	2	1	0.9	...
Independence.....	3,910	11	42	26.05	30.07	+.02	49.2 + 0.0	74	3	66	14	30	32	40	39	32	59	0.00	-0.3	0	3,471	nw.	25	se.	27	17	9	4	3.8	...
<i>Middle Plateau.</i>																											2.4			
Reno.....	4,532	74	81	25.57	30.17	+.05	43.4 + 2.4	76	4	60	16	20	27	45	34	24	54	T.	-1.1	0	3,863	w.	44	w.	13	19	10	1	2.5	T.
Tomopah.....	6,090	12	20	24.18	30.10	-.06	46.6 + 6.8	68	4	55	20	30	38	24	34	17	32	0.00	-0.9	0	4,216	se.	24	nw.	28	22	7	1	1.8	...
Winnemucca.....	4,344	14	26	25.73	30.21	+.07	37.8 + 0.3	71	5	57	20	25	32	52	28	17	53	0.02	-0.7	0	2,438	w.	33	sw.	13	18	5	7	3.2	0.1
Modena.....	5,473	10	43	24.72	30.17	+.09	38.4 + 0.6	72	4	58	6	30	19	51	26	11	40	0.00	-0.6	0	6,050	w.	34	sw.	28	20	8	2	2.2	...
Salt Lake City.....	4,380	147	189	25.76	30.19	+.07	43.4 + 3.0	72	5	54	24	15	33	28	35	27	56	0.37	-1.0	0	3,815	se.	34	nw.	13	19	7	4	2.8	1.0
Durango.....	6,546	10	40	25.51	30.14	+.06	42.2 + 2.3	68	2	57	17	23	28	35	32	20	46	0.02	-0.5	1	4,059	se.	20	nw.	14	24	6	0	1.8	...
Grand Junction.....	4,602	82	96	25.51	30.14	+.06	42.2 + 2.3	68	2	57	17	23	28	35	32	20	46	0.02	-0.5	1	4,059	se.	20	nw.	14	24	6	0	1.8	...
<i>Northern Plateau.</i>																											6.4			
Baker.....	3,471	48	53	26.56	30.21	+.05	38.8 + 3.9	64	5	50	15	15	28	33	32	24	58	0.16	-1.0	6	5,375	se.	31	w.	13	8	16	6	5.0	0.7
Boise.....	2,739	78	86	27.52	30.23	+.06	41.8 + 2.8	73	5	53	19	23	30	35	34	24	51	0.11	-0.8	4	2,773	nw.	29	sw.	13	8	15	6	6.3	...
Lewiston.....	757	40	48	29.31	30.13	+.01	43.7 + 2.8	64	1	52	28	22																		

TABLE II.—Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during November, 1914, at all stations furnished with self-registering gages.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Abilene, Tex.	12			1.17																0.38	
Albany, N. Y.	15			0.52															.13	*	
Alpena, Mich.	15-16			0.50																	
Amarillo, Tex.	25			T																T	
Ammiston, Ala.	15			0.86																.56	
Asheville, N. C.	30			1.24																.36	
Atlanta, Ga.	14-15	10.05 p. m.	6.05 a. m.	1.53	3.33 a. m.	2.56 a. m.	.38	.10	.37	.65	.85	.80									
Atlantic City, N. J.	15			0.48																.24	
Augusta, Ga.	14			1.45																.35	
Baker, Ore.	13-14			0.08																*	
Baltimore, Md.	15			2.12																.30	
Bentonville, Ark.	8			0.44																*	
Binghamton, N. Y.	16			0.13																.10	
Birmingham, Ala.	29			0.61																.14	
Bismarck, N. Dak.	12			0.42																*	
Block Island, R. I.	19			1.28																.46	
Boise, Idaho.	28			0.05																.04	
Boston, Mass.	19			1.66																.32	
Buffalo, N. Y.	15			0.92																.16	
Burlington, Vt.	19			0.68																*	
Cairo, Ill.	23			0.49																.20	
Canton, N. Y.	15-16			0.91																*	
Charles City, Iowa.	20-30			0.24																*	
Charleston, S. C.	14			1.68																.60	
Charlotte, N. C.	8-9			0.59																.28	
Chattanooga, Tenn.	8	1.26 p. m.	8.22 p. m.	0.62	2.12 p. m.	2.27 p. m.	.05	.10	.30	.37										*	
Cheyenne, Wyo.	28			0.24																.07	
Chicago, Ill.	24			0.08																.19	
Cincinnati, Ohio.	15			0.53																.14	
Cleveland, Ohio.	8			0.74																.13	
Columbia, Mo.	7			0.28																.37	
Columbia, S. C.	30			1.16																.22	
Columbus, Ohio.	30			0.54																.21	
Concord, N. H.	15-16			0.98																T	
Concordia, Kans.	7, 18, 30			T																	
Corpus Christi, Tex.	2	2.40 p. m.	6.20 p. m.	1.19	3.23 p. m.	4.17 p. m.	.07	.06	.13	.21	.24	.27	.32	.41	.64	.82	.95	1.08			
Davenport, Iowa.	15			0.10																*	
Dayton, Ohio.	8			0.54																.13	
Del Rio, Tex.	1	2.20 a. m.	8.35 a. m.	2.61	3.42 a. m.	4.57 a. m.	.24	.13	.32	.38	.51	.58	.78	.94	1.06	1.22	1.28	1.57	1.88		
Denver, Colo.	14			0.28																*	
Des Moines, Iowa.	14			0.28																.11	
Detroit, Mich.	3			0.34																.25	
Devil's Lake, N. Dak.	11-12			0.33																*	
Dodge City, Kans.	16			T																T	
Do.	29			T																T	
Dubuque, Iowa.	14-15			0.18																.12	
Duluth, Minn.	2			0.20																.19	
Durango, Colo.	13			0.58																.34	
Eastport, Me.	13			0.23																.08	
Elkins, W. Va.	16			0.58																*	
Ela Paso, Tex.	20-21			0.50																*	
Erie, Pa.	2			0.35																.28	
Escanaba, Mich.	2			0.82																.21	
Eureka, Cal.	27			0.82																.08	
Evansville, Ind.	29			0.39																*	
Flagstaff, Ariz.	29			0.09																	
Fort Smith, Ark.	8			0.24																.17	
Fort Wayne, Ind.	8			0.38																.08	
Fort Worth, Tex.	26			3.06																.64	
Fresno, Cal.	1			0.11																.10	
Galveston, Tex.	12-13	6.30 a. m.	D. N. a. m.	1.89	9.54 p. m.	10.39 p. m.	.91	.05	.26	.35	.49	.59	.64	.71	.76	.81	.72	.94			
Grand Haven, Mich.	24	8.15 p. m. ¹	8.55 a. m. ²	.78	11.20 a. m.	12.20 p. m.	.98	.07	.15	.18	.25	.31	.35	.42	.45	.58	.61				
Grand Junction, Colo.	29			0.02																.01	
Grand Rapids, Mich.	3			0.23																.22	
Green Bay, Wis.	2			0.35																.35	
Hannibal, Mo.	7-8			0.13																.08	
Harrisburg, Pa.	15			1.03																.18	
Hartford, Conn.	15-16			1.21																*	
Hatteras, N. C.	14			0.47																.27	
Havre, Mont.	13-14			0.22																*	
Helena, Mont.	12-13			0.23																*	
Houghton, Mich.	3-4			1.07																*	
Houston, Tex.	8	11.44 a. m.	12.08 p. m.	0.42	11.49 a. m.	11.59 a. m.	.03	.21	.39											T	
Huron, S. Dak.	18			T																T	
Independence, Cal.	30			T																	
Indianapolis, Ind.	8			0.60																.13	
Iola, Kans.	7			0.43																.24	
Jacksonville, Fla.	29-30	8.12 p. m.	7.50 a. m.	1.55	10.48 p. m.	11.19 p. m.	.35	.17	.34	.52	.69	.85	.97	.99						.15	
Kalispell, Mont.	3			0.29																.11	
Kansas City, Mo.	7			0.24																*	
Keokuk, Iowa.	24			0.21																.28	
Key West, Fla.	7			1.15																.38	
Knoxville, Tenn.	8			0.57																*	
La Crosse, Wis.	14			0.25																.11	
Lander, Wyo.	0			0.00																.00	
Lansing, Mich.	3			0.43																.38	
Lewiston, Idaho.	3			0.23																.11	
Lexington, Ky.	29-30			1.27																.32	
Lincoln, Nebr.	30			0.03																.01	
Little Rock, Ark.	27			1.50																.19	
Los Angeles, Cal.	9																				

TABLE II.—Accumulated amounts of precipitation for each 5 minutes, for the principal storms in which the rate of fall equaled or exceeded 0.25 inch in any 5 minutes, or 0.80 in 1 hour, during November, 1914, at all stations furnished with self-registering gages—Continued.

Stations.	Date.	Total duration.		Total amount of precipitation.	Excessive rate.		Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Meridian, Miss.	27			0.89																	
Miami, Fla.	8-9	9.35 p.m.	D. N. a.m.	4.79	9.50 p.m.	11.45 p.m.	.02	.10	.46	.83	1.16	1.47	1.77	2.04	2.23	2.36	2.56	.22	3.48	3.90	4.59
Milwaukee, Wis.	2			0.19																	
Minneapolis, Minn.	20-30			0.15																	
Mobile, Ala.	13-14	7.10 a.m.	D. N. a.m.	5.27	10.45 p.m.	12.32 a.m.	3.10	.09	.18	.23	.32	.46	.63	.73	.79	.85	.89	.99	1.32	1.77	1.94
Do.	27-28	6.55 a.m.	D. N. a.m.	3.65	7.39 p.m.	8.54 p.m.	.80	.06	.14	.18	.21	.25	.30	.36	.43	.57	.71	1.00	1.37		
Modena, Utah	0			0.00																	
Montgomery, Ala.	28			1.29																	
Moorhead, Minn.	12			0.32																	
Mount Tamalpais, Cal.	1			1.45																	
Mount Weather, Va.	15			2.26																	
Nantucket, Mass.	16			0.49																	
Nashville, Tenn.	29			1.29																	
New Haven, Conn.	16			0.79																	
New Orleans, La.	26-27	6.55 a.m.	12.25 p.m.	2.62	10.13 a.m.	10.39 a.m.	1.84	.05	.13	.30	.58	.72	.76								
New York, N. Y.	19			0.94																	
Norfolk, Va.	15			1.42																	
Northfield, Vt.	19-20			1.34																	
North Head, Wash.	5			1.31																	
North Platte, Nebr.	15, 18			T.																	
Oklahoma, Okla.	7			0.55																	
Omaha, Nebr.	30			0.02																	
Oswego, N. Y.	22-23			0.80																	
Palestine, Tex.	12			2.07																	
Parkersburg, W. Va.	8			0.18																	
Pensacola, Fla.	13	2.30 a.m.	6.20 a.m.	1.36	3.23 a.m.	3.42 a.m.	.33	.11	.21	.38	.57										
Do.	13-14	7.10 a.m.	6.35 a.m.	7.52	2.27 a.m.	.....	3.53	.11	.21	.31	.36	.37	.40	.47	.52	.64	.79				
Peoria, Ill.	15			0.16																	
Philadelphia, Pa.	15			1.37																	
Phoenix, Ariz.	10			0.84																	
Pierre, S. Dak.	18			T.																	
Pittsburgh, Pa.	8			0.40																	
Pocatello, Idaho	28			0.13																	
Point Reyes Light, Cal.	30			0.97																	
Port Huron, Mich.	3			0.46																	
Portland, Me.	19			1.47																	
Portland, Oreg.	28			0.83																	
Providence, R. I.	19			0.82																	
Pueblo, Colo.	16			T.																	
Raleigh, N. C.	15			1.62																	
Rapid City, S. Dak.	18			0.04																	
Reading, Pa.	15			1.94																	
Red Bluff, Cal.	27			0.28																	
Reno, Nev.	1, 28, 29			T.																	
Richmond, Va.	15			1.29																	
Rochester, N. Y.	13			0.20																	
Roseburg, Oreg.	13			0.52																	
Roswell, N. Mex.	25			0.16																	
Sacramento, Cal.	1			0.26																	
Saginaw, Mich.	3			0.41																	
St. Joseph, Mo.	15			0.08																	
St. Louis, Mo.	7			0.87																	
St. Paul, Minn.	29-30			0.38																	
Salt Lake City, Utah	29			0.22																	
San Antonio, Tex.	23-24	10.45 p.m.	6.05 a.m.	1.02	11.38 p.m.	11.54 p.m.	.26	.12	.27	.40	.50	.54									
San Diego, Cal.	9			0.80																	
Sand Key, Fla.	7			1.83																	
Sandusky, Ohio	15			0.39																	
San Francisco, Cal.	30			0.35																	
San Jose, Cal.	30			0.81																	
San Luis Obispo, Cal.	1			0.12																	
Santa Fe, N. Mex.	2			T.																	
Sault Ste. Marie, Mich.	16-17			0.95																	
Savannah, Ga.	13	2.17 p.m.	7.30 p.m.	0.51	3.18 p.m.	3.33 p.m.	.05	.08	.18	.31	.40										
Scranton, Pa.	8			0.34																	
Seattle, Wash.	11			0.52																	
Sheridan, Wyo.	15			0.06																	
Shreveport, La.	27			1.37																	
Sioux City, Iowa	18			0.02																	
Spokane, Wash.	12-13			0.45																	
Springfield, Ill.	7			0.17																	
Springfield, Mo.	8			0.44																	
Syracuse, N. Y.	19-20			0.37																	
Tacoma, Wash.	2			0.78																	
Tampa, Fla.	9	7.25 a.m.	8.55 a.m.	0.76	8.03 a.m.	8.31 a.m.	.04	.05	.14	.35	.53	.64	.68								
Tatoosh Island, Wash.	1			1.61																	
Taylor, Tex.	12			2.30																	
Terre Haute, Ind.	8			0.74																	
Thomasville, Ga.	29			0.92																	
Toledo, Ohio.	8			0.21																	
Tomonah, Nev.	—			—																	
Topeka, Kans.	7			0.06																	
Valentine, Nebr.	7			0.06																	
Vicksburg, Miss.	8			0.27																	
Walla Walla, Wash.	11			0.54																	
Washington, D. C.	15			1.64																	
Wichita, Kans.	7			0.10																	
Williston, N. Dak.	12			0.14																	
Wilmington, N. C.	15			2.30																	
Winnemucca, Nev.	28			0.01																	
Wytheville, Va.	30			0.81																	
Yankton, S. Dak.	18			T.																	
Yellowstone Park, Wyo.	12-13			0.28				</													

TABLE III.—*Data furnished by the Canadian Meteorological Service, November, 1914.*

Stations.	Pressure in inches.			Temperature.					Precipitation.			
	Station reduced to mean of 24 hours.	Sea level reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. +2.	Departure from normal.	Mean maximum.	Mean minimum.	Highest.	Lowest.	Total.	Departure from normal.	Total snowfall.
St. John's, N. F.	Inches.	Inches.	Inches.	°F.	°F.	°F.	°F.	°F.	°F.	Inches.	Inches.	Inches.
Sydney, C. B. I.	29.70	29.84	-.10	36.6	+.0.1	42.3	30.9	59	18	6.00	+1.33	T. 7.0
Halifax, N. S.	29.90	29.94	-.01	38.0	+.0.9	45.1	31.0	60	20	3.06	-2.38	0.1
Yarmouth, N. S.	29.88	29.99	-.02	36.6	-.0.7	47.3	26.0	62	9	3.41	-2.26	0.5
Charlottetown, P. E. I.	29.94	30.01	-.01	39.7	-.0.2	46.1	33.3	58	15	2.93	-1.63	0.5
Chatham, N. B.	29.94	29.96	-.01	30.4	-.0.6	37.9	22.9	55	12	2.77	-1.20	4.1
Father Point, Que.	29.89	29.91	-.05	26.6	-.2.3	32.8	20.5	45	0	3.01	-0.74	0.2
Quebec, Que.	29.62	29.96	-.06	26.8	-.2.2	33.5	20.0	50	-2	2.79	-0.32	17.6
Montreal, Que.	29.76	29.98	-.05	31.2	-.0.6	37.9	24.5	62	3	4.14	+0.40	20.9
Stonecliffe, Ont.	29.30	29.93	-.08	26.8	-.2.3	35.3	18.2	60	-4	4.29	+1.71	26.9
Ottawa, Ont.	29.73	30.07	+.05	30.2	-.1.5	36.9	23.4	55	0	3.32	+0.78	13.2
Kingston, Ont.	29.70	30.02	-.02	35.8	+.0.8	43.9	27.7	59	10	2.45	-0.79	3.2
Toronto, Ont.	29.60	29.99	-.05	38.1	+.2.5	45.4	30.8	62	13	2.83	-0.31	3.3
White River, Ont.	28.54	29.89	-.08	20.9	+.0.4	30.7	11.1	47	-26	1.75	-0.10	3.2
Port Stanley, Ont.	29.37	30.03	-.02	38.0	+.1.2	46.5	29.5	65	14	2.80	-0.57	1.0
Southampton, Ont.	29.28	29.98	-.03	36.6	+.1.6	43.8	29.3	53	15	2.68	-1.01	8.3
Parry Sound, Ont.	29.27	29.98	-.03	31.7	-.0.4	40.7	22.7	60	1	5.90	+1.53	33.5
Port Arthur, Ont.	29.23	29.96	-.04	29.2	+.5.2	37.3	21.2	51	-7	1.16	-0.17	1.7
Winnipeg, Man.	29.12	29.98	-.06	26.0	+.8.0	33.5	18.4	55	-13	0.72	-0.36	6.2
Minnedosa, Man.	28.11	30.00	-.04	23.5	+.1.2	32.4	14.6	60	-22	1.87	+0.87	18.6
Qu'Appelle, Sask.	27.62	29.92	-.08	26.4	+.7.6	34.8	17.9	57	-22	1.05	+0.16	9.8
Medicine Hat, Alberta.	27.63	30.04	+.04	37.2	+.9.8	46.9	27.6	62	0	0.23	-0.69	2.3
Swift Current, Sask.	27.31	29.92	-.10	32.6	+.9.4	41.6	23.5	65	-7	0.92	+0.23	7.9
Calgary, Alberta.	26.31	29.91	-.07	32.0	+.6.2	41.7	22.2	58	-10	2.72	+1.84	27.2
Banff, Alberta.	25.29	29.98	+.02	28.7	+.2.9	35.3	22.1	52	-15	2.59	+0.32	24.6
Edmonton, Alberta.	27.54	29.87	-.10	29.8	+.6.9	37.5	22.0	54	-6	0.85	+0.27	7.2
Prince Albert, Sask.	28.31	29.92	-.09	22.0	+.6.6	26.6	17.5	45	-12	1.10	+0.27	5.4
Battleford, Sask.	28.16	29.94	-.08	27.8	+.11.5	36.8	18.8	55	-15	0.74	+0.16	6.0
Kamloops, B. C.	28.76	30.00	+.04	37.7	+.4.3	42.9	32.6	58	16	1.01	-0.45	4.8
Victoria, B. C.	28.76	29.86	-.13	45.0	+.1.8	48.4	41.5	54	33	5.83	-1.14	.....
Barkerville, B. C.	25.52	29.88	-.02	26.6	+.3.0	32.5	20.7	46	-2	4.51	+1.22	36.5
Hamilton, Bermuda	29.97	30.13	+.08	68.0	-.0.7	73.5	62.5	77	59	1.04	-3.34	.....

